



PATENT
P56525RE

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF APPEALS AND INTERFERENCES

In re Application of:

Appeal No. 2004-0677

KI-OOK PARK *et al.*

Original Patent No. 5,917,679 issued on 29 June 1999

Serial No.: 09/892,790

Examiner: TUPPER, ROBERT S.

Filed: 28 June 2001

Art Unit: 2652

For: PSEUDO CONTACT TYPE NEGATIVE PRESSURE AIR BEARING SLIDER

CERTIFICATE OF MAILING

Mail Stop Appeal Brief-Patents

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

Sir:

This is to certify that on this, the 2nd April 2007, in Response to Examiner's Paper No. 28 mailed on the 1st of March 2007, **Supplemental Reply Brief** (in triplicate) was deposited with the U.S. Postal Service, as first class mail, with post card postage prepaid, in an envelope addressed to:

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Respectfully submitted,

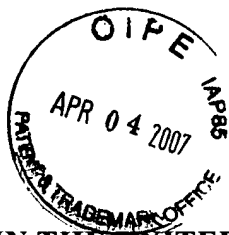
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Folio: P56525RE
Date: 04/02/7
I.D.: REB/syk



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Appeal No. 2004-0677

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For: PSEUDO CONTACT TYPE NEGATIVE PRESSURE AIR BEARING SLIDER

SUPPLEMENT To REPLY BRIEF

Paper No. 43

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

Attn: Board of Patent Appeals & Interferences

Sir:

Pursuant to 37 C.F.R. §41.43 and §41.50, and in response to the *Examiner's Response* Paper No. 20070226 mailed on the 1st of March 2007, Appellant respectfully requests consideration of this *Supplement To Appellant's* earlier filed *Reply Brief*, prepared in reply to the Examiner's Response to Clarification Request of Board of Patent Appeals and Interferences.

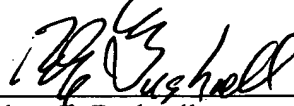
Pursuant to 37 C.F.R. §41.50(a)(2)(ii), Appellant requests "that this appeal be maintained."

Folio: P56525RE
Date: 2 April 2007
I.D.: REB/kf/ny

**CERTIFICATE OF
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For Robert E. Bushnell
Reg. No. 27,774

VIII. ARGUMENT

(IV). Rejection of Claims 21, 30-32 and 41 Under 35 U.S.C. §102(a) Over Nepela '981

The *Examiner's Response* appears to have not provided the modality for a demonstration of anticipation under 35 U.S.C. §102(a) requested by the Board,¹ and has instead attempted to attribute teachings of Nepela '981 about his "relief vents" 133 to "central recessed cavity 128", and about his side rails 112, 114, to the opposite legs of the inverted U-shaped center pad 108, thereby confusing the clarification requested by the Board. In essence, the *Examiner's Response* is believed to have failed to address the issue raised in Appellant's *Appeal Brief*, and summarily seeks to dismiss Appellant's analysis of the anticipation rejection by once again, albeit in different words, that "Appellant's references to the siderails (112, 114) are not on point." Instead, the Examiner raises four additional issues which Appellant addresses below.

F. The *Examiner's Response to Clarification Request* (Paper No. 20070226) Departs From the Express Teachings of Nepela *et al.* U.S. 5.568.981

Claims 21, 30, 31, 32 and 41 were previously rejected under 35 U.S.C. §102(a) and (e)

¹ *Ex parte Braeken*, 54 USPQ2d 1110 (Bd.Pat.App. & Int. 1999) provides an excellent modality for concisely demonstrating anticipation under 35 U.S.C. §§(a) and (c).

as being anticipated by Nepela '981. 35 U.S.C. §102(a),² as well as §102(e),³ require a determination of whether *the invention* was anticipated.

First, in Paper No. 20070226, the Examiner addresses *an invention* different from that defined by Appellant's claims 21, 30, 31 and 42, and also different from that taught by Nepela '981. Specifically, in a single sentence the Examiner endeavors to demonstrate anticipation of the second paragraphs of Appellant's independent claims 21 and 31,⁴ by asserting that Nepela '981 discloses:

“a U-shaped air bearing platform (108) defining a negative pressure cavity (cavity which includes the space between the rail of the U-shaped air bearing platform which indeed provides a *central recessed cavity that extends from the central pad to the trailing edge of the slider* – e.g., see COL. 2, ll. 50-51) on said principal surface”⁵

In point of fact, the citation of Nepela '981 advanced by the Examiner⁶ does not discuss “a U-shaped air bearing platform (108)”;⁷ moreover, this citation of Nepela '981 advanced by the

² 35 U.S.C. §102(a) reads, in part, “A person shall be entitled to a patent unless – (a) *the invention* was known or used by others in this or a foreign country, before *the invention* thereof by the applicant for patent”

³ 35 U.S.C. §102(e) reads, in part, “A person shall be entitled to a patent unless – (a) *the invention* was described in ... (2)an application for patent by another filed in the United States before the invention by the applicant for patent”

⁴ Appellant notes that piecemeal anticipation as advanced by Paper No. 20070226 does not the standard for anticipation of *the invention* required by any paragraph of 35 U.S.C. §102.

⁵ Paper No. 200700226, page 5, last four lines.

⁶ Nepela '981, column 2, lines 50 and 51.

⁷ Paper No. 200700226, page 5, last four lines.

Examiner⁸ does not, as is advocated by the Examiner, discuss “a U-shaped air bearing platform (108) *defining a negative pressure cavity* (cavity which includes the space between the rails of the U-shaped air bearing platform which indeed provides *a central recessed cavity that extends from the central pad to the trailing edge of the slider ... on said principal surface ...*.”⁹

Instead, and in contradiction to the foregoing insertions set forth in Paper No. 20070226, the complete passage of Nepela ‘981 cited by the Examiner teaches that,

“**Relief vents** are formed between the two side rails and the central pad and extend from the slider leading edge to connect to a central recessed cavity that extends from the central pad to the trailing edge of the slider.”¹⁰

In annotated form, this passage of Nepela ‘981 would read:

“Relief vents **133**¹¹ are formed between the two side rails **112**, **114**¹² and the central pad **108**¹³ and extend from the slider leading

⁸ Nepela ‘981, column 2, lines 50 and 51.

⁹ Paper No. 200700226, page 5, last four lines.

¹⁰ Nepela ‘981, column 2, lines 50 and 51.

¹¹ Nepela ‘981 does not discuss his relief vents 133 either in conjunction with Figure 5a, or in conjunction with Figures 5b through 5d.

¹² Nepela ‘981 does not discuss the particulars of his embodiment shown in Figure 5c; Appellant that therefore, taken the liberty of referring the component parts of other Figures of Nepela ‘981 which are discussed by Nepela ‘981.

¹³ Nepela ‘981, column 5, line 62, “wherein the center pads 106, 108, 110 are modified to accommodate different skew/velocity ranges for different applications used with negative pressure air bearing sliders of the instant invention.”

edge **21**¹⁴ to connect to a central recessed cavity **128**¹⁵ that extends from the central pad **108**¹⁶ to the trailing edge (?)¹⁷ of the slider.”¹⁸

In short, and contrary to the clarification advanced by the Paper No. 20070226, the passage advocated by the Examiner describes the relief vents 133 of Nepela ‘981, rather than Nepela ‘981’s central recessed cavity 128.¹⁹ Consequently, Nepela ‘981 does not make an express teaching of Applicant’s “U-shaped air bearing platform defining a negative pressure cavity on said principal surface”²⁰

Second, Appellant further notes that although Figures 2b, 3c, 4d and 5c all show substantially identically shaped, inverted U center pads 48, 68, 102 and 108 respectively, Nepela ‘981 does not explain or ascribe any particular function or characteristic to these inverted U-shapes.

Third, the subsequent passage of the single sentence written in Paper No. 20070226 to address the penultimate paragraphs of claims 21 and 31, shifts the object of the sentence from

¹⁴ Nepela ‘981, column 5, lines 17 and 18.

¹⁵ Nepela ‘981, column 6, lines 7 and 8, to wit, and referring to Figure 5a, “A central negative pressure region 128 that is aft of the center pad 104”

¹⁶ Nepela ‘981, column 5, line 62.

¹⁷ Nepela ‘981 is believed to have not labeled the “trailing edge of the slider” with a reference symbol.

¹⁸ Nepela ‘981, column 2, lines 50 and 51.

¹⁹ Nepela ‘981, column 6, lines 7 and 8, to wit, and referring to Figure 5a, “A central negative pressure region 128 that is aft of the center pad 104”

²⁰ Appellant’s independent Claims 21 and 31, penultimate paragraphs.

the “U-shaped air bearing platform (108)” to “two separate air bearing platforms.”²¹ In particular, Paper No. 20070226 argues that Nepela ‘981 discloses:

“a U-shaped air bearing platform (108) defining a negative pressure cavity (cavity which includes the space between the rail of the U-shaped air bearing platform which indeed provides *a central recessed cavity that extends from the central pad to the trailing edge of the slider* – e.g., see COL. 2, ll. 50-51) on said principal surface”²²,

and then shifts objects of that sentence, by asserting:

“said U-shaped air bearing platform comprising not more than two separate air bearing platforms (e.g. the [unnumbered] left side leg of the U-shaped air bearing as seen in FIG. 5c and the [also unnumbered] right side leg of the U-shaped air bearing as seen in FIG. 5c – the platforms joined by a cross-rai extending normal to the longitudinal direction of the slider), said platforms each extending rearwardly toward said rear portion of said principal surface and respectively terminating at a first rear termination and a second rear termination (see Examiner’s marked-up copy of FIG. 5c, appended herewith), at least one of said not more than two separate air bearing platforms including a side wall portion (e.g., vertical wall surface extending from the air-bearing platforms including a side wall portion (e.g., vertical wall surface extending from the air-bearing surface of the air bearing platform 1 or 2, to the bottom principal surface)”²³

In point of fact, this latter portion of the Examiner’s single sentence finds no support in the text of Nepela ‘981. In contradistinction to this fanciful description of central pad 108, Nepela ‘981 teaches that,

²¹ Nepela ‘981 identifies these “two separate air bearing platforms” with reference numerals 112, 114.

²² Paper No. 200700226, page 5, last four lines.

²³ Paper No. 200700226, pages 5 and 6.

“The negative pressure air bearing slider has two side rails providing *air bearing surfaces* extending *fully* from the leading edge towards the trailing edge of the slider, and a central pad at the leading edge for providing an additional *air bearing surface*.”²⁴

In other words, and in contradistinction to Appellant’s “not more than two separate air bearing platforms”,²⁵ by his express teachings, Nepela ‘981 teaches three *air bearing surfaces*.²⁶ Consequently, on this single point, Nepela ‘981 fails to anticipate *the inventions* defined by either of claims 21 or 31.

Fourth, in Paper No. 20070226, the Examiner then endeavors to erroneously identify Nepela ‘981’s “center pad 108” as Appellant’s “cross rail portion”, despite the fact that Nepela ‘981 fails to identify any “cross-rail portion” or to use the phrase “cross rail portion”,²⁷ endeavors to confine Nepela ‘981’s central negative cavity 128 shown in Figure 5a,²⁸ to the

²⁴ That is, in terms of Figure 5c, Nepela ‘981 teaches two separate *air bearing surfaces* provided by side rails 112 and 114, and a third *air bearing surface* provided by center pad 108..

²⁵ Appellant’s claim 21, line 10, and claim 31, line 9.

²⁶ Nepela ‘981, column 2, lines 50 and 51.

²⁷ Independent Claims 21 and 31 do not use the phrase “cross rail”, while dependent claim 32 defines Appellant’s “cross rail portion extending generally laterally *across* said principal surface.” Nepela ‘981 does not use the term “cross rail” and can not be read as suggesting Appellant’s “cross rail portion extending generally laterally *across* said principal surface” because Nepela ‘981 depends upon its *raison d’etre* of “In keeping with this invention, relief bends 30 are formed *between* the side rails 10, 12 and the central pad 8 **and extend from the leading edge of the slider to contact the negative pressure cavity 18.**” Col. 3, lines 54-58.

²⁸ Nepela ‘981 does not discuss the particulars of his embodiment shown in Figure 5c; Appellant that therefore, taken the liberty of referring the component parts of other Figures of Nepela ‘981 which are discussed by Nepela ‘981.

minuscule region defined by Column 5, lines 59-60 of Nepela '981; and endeavors to label in the Attachment A, "the vertical wall surface extending from the air-bearing surface of the air bearing platform 1 or 2, to the bottom principle surface" (*see the Examiner's comments, on page 6, first paragraph as 'sidewall portion' which the Examiner labeled in his Attachment A*). It seems that the subject matter Nepela '981 and Appellant's pending claims are classified in class 360 at subclass 235.9, as "rear side edge detail", and that the Examiner has ignored the fact that no reference currently classified in that subclass, or apparently no reference classified in the entirety of class 360 defines the term "side wall."

It also seems that Appellant is the sole U.S. patent (see Appellant's parent U.S. 5,917,679 patent in column 6, at lines 37 and 38) to define the term "side wall." This is significant because Nepela '981 depends upon the gaps between his center pad 108 and his side rails 112, 114. Nepela '981 also depends upon the presence of "negative pressure cavities 128c that are associated with each side rail 112, 114" (*see Nepela '981 at column 5, lines 57-60*), as well as "side reliefs 126" collectively, in order to ensure longitudinal symmetry characteristics, minimized sensitivity of flying height variation, and minimum roll and roll variation. Side reliefs 126 negate the presence of Appellant's side wall portion.

In essence, the Examiner has improperly mislabeled the center pad 108 of Nepela '981 as your client's cross rail, despite the fact that Nepela '981 clearly depends upon gaps 133 adjoining center pad 108, and does not assert that he teaches any "cross rail", and despite the fact that modification of side rails 112, 114 of Nepela '981 as illustrated in your client's Figures 6a, b would tend to minimize or eliminate "negative pressure cavity 128c that are associated with

each side of 112, 114" of Nepela '981's Figure 5c.

IX. CONCLUSION

The feature attacked by the Examiner is only Appellant's "U-shaped air bearing platform", which defines specific air bearing surfaces, and does not purport to either define or exclude other air bearing surfaces upon the principal surface. What Nepela '981 lacks is this specific U-shaped air bearing platform. The ability of claims 21 and 31 to read upon other sliders which have air bearing platforms located at other parts of the principal surface is irrelevant to the question of whether centerpad 108 anticipates Appellant's U-shaped air bearing platform, as defined by claims 21 and 31. The Examiner has incorrectly considered only isolated limitations in Appellant's definition, and has failed to consider Appellant's definition of the U-shaped air bearing platform in its entirety. In view of the inability of Nepela '981 to meet the entirety of these features of Appellant's U-shaped air bearing platform, there is no anticipation.

Appellant again concludes that the Examiner Staff has overlooked the express teachings of Nepela '981²⁹ which conclusively prevent "the leg portions"³⁰ of centerpad 108 from being read upon Appellant's U-shaped air bearing platforms defined by claims 21 and 31. Given this express teaching by Nepela '981, the interpretation given to center pad 108 by the Examining

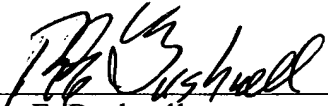
²⁹ See, by way of example, the teachings of Nepela '981 in column 2, lines 44 through 46, which not only recognize that its "two side rails" are distinct and functionally different from the other air bearing surfaces, but attribute specific critical properties and functions to those "two side rails."

³⁰ *Examiner's Answer*, Paper No. 20, page 5.

Staff is technically at variance with Nepela '981, and that interpretation may not be used to support an assertion of anticipation under either 35 U.S.C. §102(a) or 35 U.S.C. §102(e). The Board is respectfully requested to refuse to sustain this rejection.

A Request for Oral Hearing was previously filed, together with the statutory fee incurred was previously paid on the 28th of April 2003. Appellant renews its request for an oral hearing before the Board. Should other fees be incurred however, the Commissioner is authorized to charge Deposit Account No. 02-4943 of Appellant's undersigned attorney in the amount of such fees.

Respectfully submitted,


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